EXHIBIT 5

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF ARKANSAS
CENTRAL DIVISION

DYLAN BRANDT, et al.,

PLAINTIFFS,

v. **No. 4:21-CV-00450-JM**

LESLIE RUTLEDGE, et al.,

DEFENDANTS.

DECLARATION OF DR. PATRICK W. LAPPERT

Pursuant to 28 U.S.C. 1746, I declare:

I. KNOWLEDGE, TRAINING, AND EXPERIENCE

1. **Education and Training:** I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee-Memphis, 1992-1994. My professional background, experience, and publications are described in more detail in my curriculum vitae, which is attached as Exhibit A to this declaration.

2. **Board Certifications in Medicine:** I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).

3. **Medical Staff Appointments:** I served as the Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay,

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1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, Virginia, 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, Virginia, 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, Virginia, 1996-2002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, Virginia, 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska and Alabama.

4. **U.S. Surgeon General Service:** I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002.

5. **Faculty Appointments:** I served as Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002. I also served on the teaching faculty of the Via College of Osteopathic Medicine, 2017-2020.

6. **Military Service:** I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983. I served as a Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985, and I was Assigned Marine Fighter/Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. I was deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, and I served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002.

7. **Publications - Peer Reviewed Medical Journals:** Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep; 102(3):553-4; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. J Plastic and Reconstructive Surgery. 1991; 87 (6): 1048-53; Lappert P. Patch Esophagoplasty. J Plastic and Reconstructive Surgery. 1993; 91 (5): 967-8; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. *J Craniofacial Surg.* 1995;6(4):327–331; Lappert PW. Scarless Fetal Skin Repair: "Unborn Patients" and "Fetal Material". J Plastic and Reconstructive Surgery. 1996 Nov; 98(6): 1125; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. Plastic and Reconstructive Surgery 1998; 102(5): 1642-5.

8. **Publications - Medical Textbooks:** Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000.

9. **Operations and Clinical Experience - Consultations and Discussions:** As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transi-

tioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

10. **Retained as an Expert Witness - Compensation - Bases for Opinions:** I have been retained as an expert witness by the State of Arkansas for the defense in connection with this litigation. I have actual knowledge of the matters stated in this declaration. I am being compensated at an hourly rate for actual time devoted, at the rate of $400 per hour including report drafting, travel, testimony, and consultation. My compensation does not depend on the outcome of this litigation. To formulate opinions in this case I have reviewed many scientific publications, case filings, and the plaintiffs' witness declarations.

11. **Expert Report Limitations:** My opinions and hypotheses in this matter are — as in all expert witness reports — subject to the limitations of documentary and related evidence, the impossibility of absolute predictions, as well as the limitations of social, biological, and medical science. All opinions are offered to a reasonable degree of medical certainty. I have not met with, nor personally interviewed, anyone in this case. As always, I have no expert opinions regarding the veracity of witnesses in this case. I have not yet reviewed all of the evidence in this case and my opinions are subject to change at any time as new information becomes available to me. Only the trier of fact can determine the credibility of witnesses and how scientific research may or may not be related to the specific facts of any particular case. In my opinion, a key role

of an expert witness is to help the court, lawyers, parties, and the public understand and apply reliable scientific, technical, and investigative principles, hypotheses, methods, and information.

II. GENDER AFFIRMING TREATMENTS ARE EXPERIMENTAL.

12. "Gender affirming" treatments remain experimental as the historic Branstrom study and National Reviews in England, Sweden, and Finland indicate. "Gender affirming" treatments (i.e., hormones and surgery) have not been proven effective, or even competently tested. Such "treatments" are not generally accepted by the relevant scientific community and have no documented error rates (See, Daubert/Kumho). Patients who experience a gender identity that is discordant with biological sex have an alarmingly high incidence of serious psychosocial morbidity including depression, anxiety, eating disorders, substance abuse, HIV infection, suicidality, and homelessness. Connolly, M. D., M. J. Zervos, C. J. Barone, C. C. Johnson, and 2nd C. L. Joseph. 2016. *"The Mental Health of Transgender Youth: Advances in Understanding.*" Journal of Adolescent Health 59:489–95. :10.1016/j.jadohealth.2016.06.012. While a need for effective treatment modalities is clear, there are currently significant deficiencies in our understanding of the etiology of this condition, of the risks and benefits of the current experimental (unproven, untested) medical interventions, and of the long-term success of various "affirmation" treatments in achieving the primary desired goal of reducing mental illness including reductions in suicide risk.

13. Multiple recent studies and reviews including the recent national science summaries and guidelines from England-NICE, Sweden, Finland, the Cochrane Review, the British Royal College of Psychiatrists and others all document significant deficits in our current understanding of these complex disorders and significant defects in the "low quality," contradictory, and controversial existing evidence. As we strive to provide real, effective, and sustained treat-

ment to patients who experience gender dysphoria within established ethical boundaries, it is essential that we properly and scientifically research the causes of gender dysphoria as well as conduct competent, properly conducted randomized clinical trials and long-term treatment outcome studies. These basic, foundational tasks — the tasks that make experimental procedures actual, proven treatments worthy of trust — have *never been accomplished in the highly controversial field of the transgender treatment industry*. Why? Suffering and vulnerable patients and their families continue to wait for this basic, foundational scientific work to be completed. Meanwhile, affirmation "treatments" are properly viewed as experimental. (See detailed citations in the "Notes" section of this report below).

14. The science and medical world have — in just the past few years — become increasingly aware of and deeply concerned about the glaring science and ethical defects of the transgender treatment industry. For example, the very recently released 2020 Finland national science review and guidelines documented "a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria." The new strict Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery, thus directly contradicting the non-science-based association protocols of WPATH. The 2020 Finland national science review and guidelines also document the ongoing lack of scientific basis for the transgender treatment industry, stating "Only limited research has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare." In sum, the Finland National Science Review and Guidelines, like the new Sweden Review and Guidelines, the Cochrane Review, and other reviews, and the collapse and recantation of the 2020 Branstrom long-term treatment outcome study (which proved *no benefits* to these "treatments") claims, all

appear contrary to the opinions of plaintiffs' experts, WPATH, and the endorsements of professional associations. (See detailed citations in the "Notes" section of this report below).

15. Meanwhile, practitioners in this troubled field continue to offer defective research and politicized endorsements from politicized, union-like associations (WPATH, APA, ACP, etc.) rather than competent, credible, valid, and reliable peer-reviewed and published scientific evidence. The plaintiffs' experts failed to even discuss the serious defects and methodological limits of transgender medicine data and experimental practices. Fifty years of experimenting is enough. It is time for the transgender treatment industry to come up with real, competently constructed scientific evidence that they help more people than they hurt. As the recent national science reviews from England, Sweden, the Cochrane Review, and Finland have all noted, it is time to step back, slow down, and prudently investigate a range of approaches — including years of careful psychotherapy prior to experimental sterilizing "treatments" — to vulnerable patients struggling with gender discordance issues. (See detailed citations in the "Notes" section of this report below).

III. THE ETHICS OF PLASTIC SURGERY

A. "Chest Masculinization" in Natal Females is Not Ethically Equivalent to Mastectomies for Breast Cancer.

16. When mastectomy is performed for the management of breast cancer, or to mitigate the proven risk of developing breast cancer in women, it is done on the basis of objective diagnoses either by pathological examination of biopsy tissue, or as in the case of prophylactic mastectomy, on the basis of genetic analysis that shows known markers of increased risk of developing breast cancer. These tests (microscopic examination of tissue specimens, detection of cell surface markers with proven association with malignancy, and genetic screening of at-risk patients) have known positive predictive value for the diagnosis of breast cancer, and these tests

have known error rates that can be used when obtaining informed consent for mastectomy. The validity of these tests has been proven using scientific methodologies that produce high quality evidence in longitudinal population studies with control populations, and very long follow up. As the result, when a woman gives consent for mastectomy to control or prevent the potentially lethal disease, it is with a clear and proven evaluation of the risks and benefits that consent is obtained. Mastectomy is being performed based upon an objective diagnosis of a potentially lethal condition, and the surgical procedure has proven benefit in management of that condition.

17. In stark contrast, this is not the case when mastectomy is performed to "masculinize" the chest of girls and women who self-identify as transgender or who self-report symptoms of dysphoria. Otherwise healthy breasts are being removed on the basis of a diagnosis that is made by the patient since there are no tests with known error rates that can be used to predict who will benefit from this disfiguring and irreversible surgery. The claim is made that chest masculinization has proven benefit in reducing dysphoria and the associated risk of suicide. But published studies that make this claim of benefit offer evidence that is low to very low quality, typically small case collections with self-selection bias, very short follow up, and no case controls.

18. The best data presently available on the long-term effects of medical and surgical transitioning are long-term, longitudinal, population based studies. For example, Dehjne, et al., examined the putative long-term benefit of full transitioning (including hormonal and surgical treatments) found in the Swedish medical database. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 https://doi.org/10.1371/journal.pone.0016885). That database includes

all persons in the Swedish medical system, from pre-natal to death. It reports all episodes of care and all demographic information in a uniform vocabulary. Furthermore, Sweden has been on the forefront of "gender affirmation" long before the American medical system seriously considered its claims. Because of the nature of Sweden's database, it is possible to study a cohort of patients that exactly matches the inquiry group with regards to age, sex, economic status, etc. It is possible to ask precisely such questions as, "What is the likelihood that a fully transitioned transgender male will be hospitalized for psychiatric illness when compared to the age/sex matched control group?" or "What is the relative risk of suicide in transgender persons, when compared to age/sex matched controls?"

19. Why are such longitudinal, population based studies superior to the case-collection/case series methodology? Because confounding variables such as age, sex, and self-selection biases are removed. In the flawed case-collection methodology, the reported cases are typically only those who return for follow up. You have no way of knowing if the patient had a good outcome or didn't return for follow up because they were in a psychiatric hospital, were incarcerated, or committed suicide. In the Swedish longitudinal study, the suicide is in the same database, as are the other issues of hospitalization, incarceration, and addiction treatment, among other rates of comorbidity. Thus the longitudinal population study can give us what is called a "hazard ratio" for a particular study population (patients who have completed transgender transition).

20. What did this Swedish study show us? It showed us that the risk of completed suicide in all transgender persons is *19.1 times higher* than in the control cohort. If you look only at patients who have transitioned — patients after "treatment" — from female to "male presentation," the risk of completed suicide is *40 times higher* than in the general population.

(Note: this finding is consistent with the historic Branstrom 10yr follow up study, which found no benefits to "transitioning treatments" but did note an increased risk of serious suicide attempts and anxiety disorders AFTER "treatment." (Correction to Bränström and Pachankis, Am J Psychiatry 177:8, August 2020; see detailed citations in the "Notes" section of this report below).

21. Another cautionary note was added to the literature review by the reputed Cochrane Review, a UK based international association of researchers who examine the quality of scientific evidence used in medical decision making. The Cochrane Review recently published findings concerning the medical evidence used to support the decision to give young women cross sex hormones as part of the transition process. The authors summarize the world literature review thus: "We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition. This lack of studies shows a gap between current clinical practice and clinical research." (Does hormone therapy help transgender women undergoing gender reassignment to transition? See, Haupt C, Henke M, Kutschmar A, Hauser B, Baldinger S, Saenz SR, Schreiber G., Cochrane Review, 28 Nov 2020).

22. Similar issues of very poor, low quality scientific support for chest masculinization surgery can be seen in a recent article by Tolstrup et al. published in the journal Aesthetic Plastic Surgery (See Anders Tolstrup, Dennis Zetner, Jacob Rosenberg, Outcome Measures in Gender-Confirming Chest Surgery: A Systematic Scoping Review, Aesthetic Plast Surg 2020 Feb;44(1):219-228. doi: 10.1007/s00266-019-01523-1. Epub 2019 Oct 29). The article reports a comprehensive review of the world literature concerning the efficacy of "gender confirming" chest surgery in transgender patients. The authors found 849 articles on the subject, published in peer reviewed medical journals. Of these 849 articles, only 47 could be included in the review. This means that only 5.5% of all the published, peer-reviewed transgender surgery articles

demonstrated even rudimentary scientific rigor. Of those 47 articles, the authors report that only 29 of the articles addressed mental health outcomes (3.4% of all the articles). What is startling is that the mental health outcomes were judged only on the basis of uncooroborated, untested, and unassessed patient subjective reporting with descriptors that varied so widely from article to article that results could not even be compared. The authors summarize by saying, "Evaluation of outcomes in gender-confirming chest surgery showed large variations in reporting, and further streamlining of reporting is therefore required to be able to compare surgical outcomes between studies." None of these negligent articles even bothered to examine rates of psychiatric hospitalization, substance abuse, self-harm behaviors, and suicide. This tells us that the main reason for performing these surgeries (psychological distress and suicide risk) isn't even evaluated with regard to efficacy.

23. An example of an article with very low quality data, reckless (now banned practices), and methodology, published in a "leading journal," and promoted as evidence for the efficacy of "chest masculinization" surgery makes this fact very clear. The lead author (Olson-Kennedy, a leading national advocate for the transgender treatment industry) is a board certified pediatrician who leads the gender clinic for the Los Angeles Children's Hospital. The article appeared in 2018 (See J. Olson-Kennedy, J. Warus, MD1, et al., *Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults; Comparisons of Nonsurgical and Postsurgical Cohorts*., JAMA Pediatr. 2018;172(5):431-436. doi:10.1001/jamapediatrics. 2017.5440). In their summary of findings, the authors reported that "chest dysphoria" is common among "trans males" (natal females seeking to present as males), and claimed that dysphoria is "decreased by surgery." They claim that regret for surgery is "rare." The article reports breast removal surgery on at least one girl aged *13 years*. (Note that this reckless, experimental

practice has now apparently been abandoned as unethical/experimentation on children by England, Sweden, and Finland). The average age of patients in the study was 19. Children were entered into the study through recruitment from among patients visiting the clinic and by telephone over a six month period. The authors found that of the patients recruited from among visitors to the clinic (convenience sampling) there was an abundance of non-operated patients, so they were forced to reach out to all the post-surgical patients by phone. Twenty-six percent of the clinic's post-surgical patients could not be reached for various reasons including no working phone, or failure to respond to multiple messages. The 26% drop-out rate is never even questioned by these authors. Were surgical patients lost to follow up because of dissatisfaction, psychiatric hospitalization, or *suicide*? This problem is called "self-selection bias," and it is evidence of careless study design. Of the remaining 74% of patients, only 72% completed the survey. This is a second example of self-selection bias. Why would some post-surgical patients who had been successfully contacted, not complete the survey? The authors — demonstrating multiple levels of confirmation bias — do not even ask such essential questions. (See detailed citations in the "Notes" section of this report below).

24. In the study, dysphoria was evaluated using what the author called "a novel measure," which amounted to a series of subjective questions about happiness that was in part designed by the adolescent test subjects themselves. Essentially, the methodology used an entirely unvalidated ("junk science") test instrument, with no known error rates and no proven predictive power. Furthermore, the post-surgical patients were administered the survey at widely varying time intervals post-surgery. The longest interval between surgery and the satisfaction survey was 5 years, but children less than a year post-surgery were included in this obviously flawed sample, and yet the authors claim evidence of "negligible regret." This is a remarkable, misleading, and

deceptive claim given that long-term, longitudinal population studies show that there is a dramatic rise in post-surgical problems such as depression, hospitalization, substance abuse, and suicide beginning at around 7 years post-surgery (Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 https://doi.org/10.1371/journal.pone.0016885). Surely the authors are familiar with the world literature on transgender outcomes?

25. Having deceptively or negligently promised in the introduction to their paper that "chest dysphoria" is reduced by surgery, at the conclusion the authors confessed to the fact that the study design and execution produced very low quality data that is not useful for patient selection, or prediction of outcomes. They even confessed that the study does not address the efficacy of surgery in improving outcomes regarding the single most compelling reason for performing the operation: mitigation of depression and suicide. The authors write: "An additional limitation of the study was the small sample size. The nonsurgical cohort was a convenience sample, recruited from those with appointments during the data collection period. There could be unknown imbalances between the nonsurgical and postsurgical cohorts that could have confounded the study findings."

26. Finally, the authors did not even bother to validate their "Chest Dysphoria Scale." Such a "made-up" scale is unlikely to accurately represent distress or correlate with properly validated measures of quality of life, depression, anxiety, or functioning." Their own analysis at the conclusion or the paper directly contradicts their own deceptive claim made in their introduction.

27. This is the kind of "junk science" that is used to support transgender medicine and surgery. It was written by board certified physicians who practice in one of the nation's largest pediatric gender clinics and published in a peer-reviewed medical journal. It is essentially useless in making any clinical decisions regarding who should be offered surgery, what is the likelihood they will benefit from it, what is the likelihood they will regret their decision, and most importantly, whether their risk of suicide would be reduced.

28. Because of the very low quality scientific support for mastectomy in the management of gender dysphoria, valid consent would require that these procedures be described as experimental, would need the approval of ethics panels to monitor human experimentation, and would require the use of valid controls found in long-term, longitudinal population based study models. These are the kinds of patient protections now endorsed in England, Sweden and Finland but still ignored in the US environment where proper scientific critiques of such studies can get faculty "cancelled." (See detailed citations in the "Notes" section of this report below).

29. Even though the transgender treatment industry has been performing these surgeries for over 50 years, gender treatment centers continue to publish the same low quality, methodologically defective studies based upon collected cases that are degraded in value by self-selection bias, confirmation bias, and short-term follow-up, while continuing to deceptively claim that such defective research provides a sufficient scientific basis for performing irreversible, disfiguring, and ultimately sterilizing hormonal treatments and surgeries**.** (See detailed citations in the "Notes" section of this report below).

B. "Chest Masculinization" in Natal Females is Not Ethically Equivalent to Gynecomastectomy.

30. Gynecomastectomy is the surgical treatment of gynecomastia, a fairly common condition in which males develop female-type breast gland tissue. Proponents of "masculinization" mastectomy in natal females erroneously equate the ethics of removing healthy breast tissue from these patients with the removal of abnormal breast tissue in men (gynecomastia). In the case of gynecomastectomy in male patients, the operation is performed to remove the objectively diagnosed presence of female type glandular breast tissue present in a male patient. Physical examination demonstrates the presence of a dense retro-areolar mass which is tender and sometimes disfiguring. Pathological examination of the removed tissue will demonstrate the presence of female-type fibroglandular tissue in a male patient. This is an objectively abnormal condition. It should further be noted that in the absence of such abnormal, female-type fibroglandular tissue, chest recontouring is considered to be cosmetic, and is typically not paid for by third-party payors.

31. I have never read a peer reviewed journal article which discusses the indications for gynecomastectomy that included any claim to reduce major depression and suicide. This is because any male patient seeking removal of abnormal, female-type, breast tissue who reported suicidal ideation would be considered incompetent to give consent, and would require a psychiatric evaluation and treatment to manage suicidal thinking before being considered for surgery.

C. **"Chest Masculinization" in Natal Females is Not Ethically Equivalent to Breast Reduction.**

32. It should be obvious that "Chest Masculinization" surgery in natal females is not ethically equivalent to breast reduction surgery in non-transgender females. In the case of breast reduction for females with excessively large breasts (macromastia, or gigantomastia), the operation is performed to relieve a debilitating orthopedic complaint of neck, back, and shoulder pain

associated with the postural/mechanical effects of the weight of the breasts. These patients experience significant activity restriction and chronic pain that is not relieved by medical management or physical therapy. Furthermore, there is voluminous actuarial data, based upon many years of longitudinal population based study by medical insurance agencies that is used to predict who will benefit from surgery, and who will not. These physical, objective tests, based upon the actual measurement of the breasts, and the patient's overall body habitus, have known error rates that can be used to predict the likelihood that a breast reduction will relieve the orthopedic complaints of neck, back, and shoulder pain. When the tissue specimens are submitted to pathology, they are weighed in order to ensure that enough tissue has been removed so that there will be a very high likelihood that the surgery will relieve the orthopedic condition of neck, back, and shoulder pain (Accuracy of Predicted Resection Weights in Breast Reduction Surgery, Theodore A. Kung, MD, Raouf Ahmed, MBBS1 Christine O. Kang, MPH,1 Paul S. Cederna, MD, and Jeffrey H. Kozlow, MD; Plast Reconstr Surg Glob Open. 2018 Jun; 6(6): e1830.

33. Based upon that, adequate pre-operative consent can be obtained. The supporting data is based in very high quality methodology. There is no quality research data, no pre-operative test or study, and no known error rates, that can be used to predict the likelihood that any child suffering from gender dysphoria will benefit from the experimental procedures of mastectomy and chest "masculinization." As noted above, because of the very low quality data, transgender chest masculinization is at best experimental and at worst, should be viewed as a form of medical child abuse — it is important to note that Finland, Sweden, and the UK appar-

ently now all agree with this analysis, as they have all retreated from such reckless surgical procedures for minors — similar to what Arkansas's science-informed, responsible legislature has now done. (See detailed citations in the "Notes" section of this report below).

34. It is crucial to remember that "chest masculinization" of healthy breast tissue results in a complete loss of function, that this loss is two-fold (breast feeding and erotic sensibility), and the cause of the loss is two-fold (gland removal and severing of the intercostal nerve). (See Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, (Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, Volume 21, Issue 3, May 2001, Pages 261–271, https://doi.org/10.1067/maj.2001.116439.

35. If a patient who undergoes "chest masculinization" should regret the surgery, they do have the option of breast reconstruction. But all that will be produced is the appearance of a breast. The patient will have lost the function of breast feeding. Additionally, the most commonly performed "masculinization" surgery involves the removal of the nipples, and subsequent re-attachment in the form of a nipple graft. Those nipples will have lost their native nerve connections that provoke erotic sensibility. All that can be hoped for is the eventual random ingrowth of local skin sensation, but there will never be erotic sensation because the particular branch of the fourth intercostal nerve which communicates with particular centers in the brain responsible for oxytocin release and erotic provocation will have been permanently severed. This means that breast function has been completely and irreversibly sacrificed for the sake of producing a cosmetic result (a masculine appearing chest). This is the exact opposite of the goals of any reconstructive surgery. It must therefore be understood that "chest masculinization"

is a cosmetic procedure that has violated the most essential principle of cosmetic surgery: never sacrifice function for the sake of a cosmetic result.

D. Masculinizing and Feminizing Chest Surgeries are Not "Medically Necessary."

36. Supporters of "transitioning" treatments justify surgical treatment based upon "medical necessity." They claim that gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, in the studies they cite no measures are made of the effects of surgery on what is claimed to constitute the "medical necessity" for these procedures.

37. In contrast, the Branstrom study cited in detail in the Notes Section of this declaration documented no reliable benefits for transgender surgery/hormonal treatments and no reduction in suicide and even an *increase* in serious suicide attempts requiring hospitalization in patients receiving surgery. These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of supporters of "transitioning treatments" — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland. (See detailed citations in the Notes section in this declaration).

38. Scientific rigor would demand an examination of such outcomes as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. One paper does ask these crucial questions concerning efficacy is a very comprehensive, long term, longitudinal population cohort study which actually shows the opposite of what plaintiffs' experts' claims for these patient outcomes. When followed beyond 8 years post operatively, this paper shows patients receiving plaintiffs 'experts' treatments have the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons

who have had no medical or surgical intervention. The fact that the citation is included by plaintiffs 'experts, but never discussed in his opinion regarding efficacy is troubling. In summary, on the issue of the safety and efficacy of these surgeries, the scientific support is very weak, while the scientific evidence rejecting the hypothesis of efficacy is remarkably strong (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 https://doi.org/10.1371/journal.pone.0016885

39. The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are performed in both men and women, for a variety of reasons, are very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from "medically indicated" surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breast are too big. The distinction between cosmetic breast reduction and medically indicated breast reduction is based upon the presenting symptoms of orthopedic problems caused by the weight of the breasts, but even then, the weight of the removed tissue is factored into the objective verification that the surgery was "medically necessary."

40. The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women.

Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland's syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be a removal of tissue. A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we have in the case of the self-identified transgender patient.

41. In the case of transgender chest surgery, the diagnosis is based on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. None of the papers typically cited by supporters of "transitioning treatments" address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess cosmetic surgery of the breast. In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence, and appears to be firmly in the category of cosmetic surgery.

E. Virtually All Transgender Patients are Born with Normal, Healthy Sex Organs and No Scientifically Validated Reason to Surgically Damage Them.

42. Sex is not "assigned at birth" but permanently "assigned" at conception by DNA. Medical technology can be used to determine a fetus's sex before birth. It is thus not scientifically correct to talk of doctors "assigning" the sex of a child at birth; almost anyone can accurately and reliably identify the sex of an infant by genital inspection with approx 99.9% accuracy. Every nucleated cell of an individual's body is chromosomally identifiably male or female—XY or XX. Claims that patients can — via hormonal and surgical treatments — obtain a

"sex change" or a "gender transition" process are misleading and scientifically impossible. In reality, the typical "transgender" gender discordant patient has normal healthy sex organs but struggles with gender discordant feelings and perceived identity — a psychiatric and not a medical problem.

F. Detransitioners are Real and Surgeons Have No Diagnostic Tools to Identify Who They Will Be.

43. The phenomenon of desistance or regret experienced later than adolescence or young adulthood, or among older transgender individuals, has to my knowledge not been quantified or well-studied. But it is a real phenomenon. I myself have worked with multiple individuals who have abandoned a trans female identity after living in it for years, and who would describe their experiences as "regret." More dramatically, a surgical group prominently active in the sexual reassignment field has published a report on a series of seven male-to-female patients requesting surgery to transform their surgically constructed female genitalia back to their original male form. See Djordjevic ML, Bizic MR, Duisin D, Bouman MB, Buncamper M. Reversal Surgery in Regretful Male-to-Female Transsexuals After Sex Reassignment Surgery. J Sex Med. 2016 Jun;13(6):1000-7. doi: 10.1016/j.jsxm.2016.02.173. Epub 2016 May 4. PMID: 27156012. Further, there is an increasingly visible online community of young women who have desisted after claiming a male gender identity at some point during their teen years. See, e.g., https://our-duty.group/2020/04/29/the-detransition-advocacy-network/. Given the rapid increase in the number of girls presenting to gender clinics within the last few years, the phenomena of regret and desistance by young women deserves careful attention and study.

44. Transgender surgeons have no objective, reliable means of evaluating the diagnostic error rate because there is no body of reliable scientific evidence that can be used to counsel the patient about what their risk of regret is. The ever growing population of de-transitioning

patients suggests that the error rate may be considerable, and the future medico-legal consequences may be proportionate.

45. Valid surgical consent requires that the surgeon is ultimately responsible for the accuracy of the diagnosis. For example, if an endocrinologist refers a patient for thyroidectomy because they have diagnosed a malignant thyroid nodule, the operating surgeon is still obliged to ensure the validity of the diagnosis. He has to entertain alternative diagnoses. Is it a benign nodule? Can it be treated with non-surgical means at lower risk to the patient? What do the scans show? What do the hormone levels show? Having evaluated all the alternative possibilities in the differential diagnosis, the surgeon can then counsel the patient and their family on the options of care, the likelihood of cure, and proper informed consent can be obtained.

46. But the transgender treatment industry, employing scientifically unsupported WPATH guidelines essentially (and unethically) excuse the surgeon from any responsibility for the diagnostic process or its consequences if the diagnosis is incorrect. The 7th edition of the WPATH guidelines requires only two letters written by psychologists, and a period of social transition. There is no action taken to verify the diagnosis on the part of the surgeon. The surgeon has no objective, reliable means by which to anticipate who might benefit or who might be harmed by surgery.

47. By the time a patient presents to a transgender surgeon, they have been the subject of affirmation processes that include everything from social transitioning, to hormonal manipulation. The surgeon is performing permanently life-altering surgical interventions to cure a psychological condition that was diagnosed by the patient, and sometimes the patient made the diagnosis before they even entered puberty. Since the abandonment of frontal lobotomies in 1967, there has been no other psychological-psychiatric condition for which surgery is performed, and

there is no other area of surgical care where the diagnostician is the patient themselves, and the surgeon has no objective, reliable means of confirming or rejecting the diagnosis.

G. I Do Not Engage in Experimental Treatments Lacking Reliable, Credible Scientific Support.

48. As multiple national science reviews and multiple peer reviewed science publications demonstrate, the relevant scientific community has never accepted the reliability, validity, safety or effectiveness of "gender affirmation" treatment procedures — including surgical procedures. Significant medical, ethical, and potential legal problems are created when health care providers employ experimental, unproven, treatment including surgical procedures. Due to the well-documented lack of scientific support and only low quality evidence of efficacy and safety, I will not personally engage in the delivery of experimental gender affirming medical interventions to patients of any age. I will not consider doing such invasive, potentially harmful surgical procedures — that can lead to life-long sterilization of vulnerable patients — until reliable, valid scientific research supports such methods.

49. The transgender treatment industry generates considerable income for hospitals, clinicians, and pharmaceutical companies. Members of the transgender treatment industry have a vested interest in believing that science has already justified their existence. Further, as sterilization is the expected adult outcome of endocrine and surgical treatments of the procedures undertaken in youth prior, the transgender treatment industry must have developed strong rationalizations to justify creating infertility. Will one day the medical profession look at support for transitioning youth in the same manner the eugenics movement is now regarded? (See, Hruz, PW, Mayer, LS, and McHugh, PR, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," The New Atlantis, Number 52, Spring 2017 pp. 3 -36 ; See also,

McHugh, P., Psychiatric Misadventures, The American Scholar, Vol. 62, No. 2 (Spring 1993), pp. 316-320

50. In summary, proponents of "affirmation care" for self-identified transgender patients have no body of quality scientific evidence that proves benefit from their interventions. They rely on low to very low quality data when they recommend affirmation therapy. Consensus statements by professional bodies are based upon the lowest category of evidence available. Advocates of "affirmation care" have no long term data to support their therapeutic recommendations, and they never compare their data to the historically proven approach of "watchful waiting." Advocates for "affirmation care" including medical and surgical intervention, have no objective test, with published error rates, that can be employed to determine who will benefit from their treatments. They rely only on subjective reporting by the patient. Transgender surgery, including "chest masculinization" does not meet the criteria for reconstructive surgery. Because the sole aim of the surgery is the claimed, but unsupported, emotional benefit, it is *by definition* aesthetic (feelings) or cosmetic (appearance) surgery. Chest "masculinization" surgery fails on professional moral grounds because informed consent is impossible (given that there is no way to predict who will benefit), and because function is utterly destroyed in order to achieve a counterfeit form.

IV. PLASTIC SURGERY IS CONCERNED WITH PSYCHOLOGY.

A. Why is Plastic Surgery Concerned with Psychology?

51. Plastic surgery has two areas of activity with broad overlap. The practice of plastic surgery includes reconstructive as well as aesthetic (often called cosmetic) surgery.

52. Reconstructive surgery is ordered to the establishment, or restoration, of normal body structures and their associated functions. The reconstructive process aims at deformities caused by trauma, disease or the management of disease such as cancer surgery, and congenital

deformities. The goal is the restoration of form and function. Sometimes functional restoration is given priority over form, as with the reconstruction of a hand injury in a man. Sometimes functional restoration is impossible, and all that can be offered is aesthetic, as with reconstruction of a facial wound that has resulted in the loss of an eye, where vision cannot be restored, and all that can be offered is a prosthetic eye.

53. Aesthetic (cosmetic) surgery on the other hand is surgery to modify the appearance of an area of the body that is functionally normal, and that has an appearance that, even though it is within the range of normal, causes some degree of annoyance or discomfort to the patient. (For example, prominent ears on a boy.) The ears are functionally normal, and their prominence may even be a recurring family trait, but their prominence is a daily annoyance to the boy; he may even have been given a pejorative nick name. A simple and safe procedure can be performed that reduces the prominence of his ears *without sacrificing any function,* and his daily annoyance is resolved. Form is changed within the range of normal, function is preserved, and the aesthetic (feelings) problem is solved.

54. In the clinical training of plastic surgeons, we learn to carefully evaluate aesthetic patients, not only for the sake of surgical planning, but because we have to understand their motivation for the surgery and how to anticipate potential complications. It is axiomatic in plastic surgery that the most avoidable complication in aesthetic surgery is disappointment and regret on the part of the patient. We are taught that disappointment is first and foremost managed by ensuring that the doctor understands what the patient is seeking to achieve, that the goal is worthy of pursuing, and that the surgeon is likely to achieve the goal.

55. Plastic surgeons are trained to recognize a particular subset of aesthetic patients who at first appear to be seeking some ordinary improvement in appearance, but upon further

evaluation discovers that the patient is seeking cosmetic surgery because they are convinced they are horribly disfigured — and *this* is the reason they feel alone, isolated and depressed. If such a patient has an otherwise normal physical appearance, then the diagnosis of Body Dysmorphic Disorder must be entertained. See (5) Body Dysmorphic Disorder, Andri S. Bjornsson, PhD, Elizabeth R. Didie, PhD, Katharine A. Phillips, MD; Dialogues Clin Neurosci. 2010 Jun; 12(2): 221–232; and Body Dysmorphic Disorder and Cosmetic Surgery Crerand, Canice E. Ph.D.; Franklin, Martin E. Ph.D.; Sarwer, David B. Ph.D. Plastic and Reconstructive Surgery: December 2006 - Volume 118 - Issue 7 - p 167e-180e.

56. Persons who suffer with this condition are seeking a physical explanation for a psychological wound. They are trying to explain their isolation, anxiety, depression, and despair by pointing to their appearance as the cause of their sorrows. Plastic surgeons learn that such patients may be elated at first with their surgery, but they return with complaints that "you didn't do the surgery right." They are disappointed because they still experience the anxiety, isolation, depression, and despair, which should not be surprising given the obvious fact that *you cannot heal a psychological wound with cosmetic surgery*.

57. Indeed, to offer cosmetic surgery to a person suffering from Body Dysmorphic Disorder is considered a failure of diagnosis. *To know that a person is suffering from body dysmorphic disorder, and to offer them surgery in spite of that knowledge is malpractice*. The surgeon is taking advantage of a psychologically vulnerable patient for the sake of financial gain. See Cosmetic Surgery and Body Dysmorphic Disorder – An Update B S. Higgins, MD and A. Wysong, MD, MS, Int J Womens Dermatolv. 4(1); March 2018.

58. Gender dysphoria is a diagnosis that is based upon the subjective reporting of the affected child. There is no objective test, with known error rates, that can be employed to confirm the diagnosis, or predict who will benefit from any putative therapeutic interventions. There is no chromosomal study, no genetic marker, no gene product, no hormonal abnormality, or any dynamic brain scan that can be used to confirm the diagnosis. Essentially, the transgender treatment industry is offering permanently life altering hormonal manipulation and irreversible surgery based upon a diagnosis that is made by an emotionally stressed adolescent, or even prepubertal child who is being socially transitioned. (See Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria Paul Hruz, MD, PhD. Linacre Quarterly 2020 Feb 87 (1)34-42. doi10.1177/0024363919873762. Epub 2019 Sep 20.)

B. **Gender Dysphoria or Gender Identity Disorder is a Logical Subcategory of Body Dysmorphic Disorder.**

59. Body dysmorphic disorder is a subcategory of obsessive compulsive disorder. What distinguishes gender identity disorder from other forms of body dysmorphic disorder is that the content of the obsessive thought is the sexed appearance of the patient. The obsessive thought is that they have the wrong genitalia, that they are really the other sex, and if they could change that, their anxiety, isolation, depression, and despair would resolve. Given that the patient is physically normal, and that the patient is seeking a change in appearance in order to resolve a feeling (aesthetic), all transgender surgery, by definition, is cosmetic surgery**.**

60. To call a "chest masculinization" mastectomy a "chest reconstruction" is not just an imprecision of language. It is intentional deception. Such mastectomy is in no way a restoration of form and function. It is rather the willful destruction of function for the purposes of producing a counterfeit form. What is more, because these mastectomies involve the irreversible destruction of normally functional parts, with associated loss of function, these operations violate

the first and most important principle of plastic surgery: It is bad surgical planning if you compromise function for the sake of a cosmetic result. In this case the compromise of function is actually a 100% loss.

C. There Are Multiple Pathways to Gender Dysphoria.

61. The diagnosis of "gender dysphoria" encompasses a diverse and controversial array of conditions, with widely differing pathways and characteristics depending on age of onset, the complexities introduced by co-occurring mental illnesses, social contagion and other environmental factors, among other things. Data from one population (e.g. adults, those struggling with complex mental illnesses) should not naively be assumed to be easily applicable to others (e.g. children, those changed by social contagion) and other factors. The developmental and mental health patterns for these groups are sufficiently different that data developed in connection with one of them cannot be assumed to be reliably applicable to another. See K. Zucker (2018), The Myth of Persistence: Response to "A Critical Commentary on Follow-Up Studies & 'Desistance 'Theories about Transgender & Gender Non-Conforming Children" by Temple Newhook et al., Intl J. of Transgenderism at 10, DOI: 10.1080/15532739.2018.1468293 ("Myth of Persistence").

V. OPINIONS REGARDING THE SHOCKING OMISSIONS OF PLAINTIFFS' REPORTS

62. As a physician and surgeon for decades, I have dedicated my life to helping the injured, the wounded, the sick, the vulnerable, and those in distress. As a physician and surgeon, I have a duty to carefully assess the available scientific research literature and determine what surgical procedures have been scientifically proven safe and effective for use on patients — and which procedures are still experimental, potentially dangerous, and may well do more harm than good for patients. Such an assessment requires the prudential review of scientific publications and my being familiar with the ongoing methodological and scientific debates in the field.

63. I have reviewed the plaintiffs' declarations from Drs. Adkins and Antommaria in this case. Those declarations demonstrate an stunning lack of knowledge or candor regarding the ongoing, raging, international scientific debates over the safety and effectiveness of "gender affirming" medical procedures. Those reports offer no proper disclosure of these controversies and demonstrate no apparent awareness of the serious methodological and ethical defects and controversies exposing the lack of scientific foundations for the transgender treatment industry. Over the past few years, multiple methodological exposes and national reviews in England (NICE), Sweden, and Finland, plus other reviews (e.g., Cochrane, Griffin, Carmichael, etc), have all raised urgent warnings and serious questions about the quality and the integrity of the scientific foundation for this very controversial field.

64. It is troubling that the plaintiffs' experts both appear to have significant financial and professional conflicts of interest as they themselves have reported in their appended curriculums vitae that much of their practices and incomes are derived from these experimental, unproven, potentially harmful methods and procedures of "gender affirmation transitioning" medical treatments. Further, not only their incomes but their professional reputations, academic positions, journal publications, and association memberships would all collapse if the transgender treatment industry collapsed due to widely noted missing evidence of safety and effectiveness.

65. The following are among the shocking errors, omissions, and failures of the plaintiffs' expert reports.

A. Failure to Disclose Multiple International Controversies and the Poor Quality of the Evidence

66. The plaintiffs' experts failed to properly disclose and discuss the international debates and controversies surrounding transgender affirmation methods and procedures discussed above. Indeed, it is difficult to imagine a more inaccurate summary of the state of the embattled,

experimental transgender treatment industry that that reflected in their reports. (See detailed citations in the "Notes" section of this report below).

67. The plaintiffs' experts failed to properly disclose and discuss multiple peer-reviewed, published exposés of significant methodological defects in research on transgender affirmation methods and procedures. Further, the plaintiffs' experts failed to properly disclose and discuss recent scientific studies and reviews including the Cochrane Review, the Carmichael study, the Griffin review and the devastating scientific critiques of the ill-fated and recanted Branstrom, et al. study, including the many multiple, detailed, methodologically sophisticated letters to the editor. (See detailed citations in the "Notes" section of this report below).

B. **Failure to Acknowledge Comorbidities**

68. Plaintiffs' experts fail to recognize how the existence of comorbidities complicate the treatment of gender dysphoric patients. It is well established in peer-reviewed medical literature that children who experience gender discordance have a very high likelihood of major anxiety disorders, major clinical depression, self-harming behaviors such as cutting, substance abuse. They also have a greater than 30% likelihood of being on the autism spectrum. Under the "affirmation care" model, these issues are more often than not ignored, ascribing all of the child's problems to their self-diagnosed gender dysphoria. (See Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals, Varun Warrier, David M. Greenberg, Elizabeth Weir, Clara Buckingham, Paula Smith, Meng-Chuan Lai, Carrie Allison & Simon Baron-Cohen ; Nature Communications volume 11, Article number: 3959 (2020), https://www.nature.com/articles/s41467-020-17794-1.

C. Failure to Acknowledge the Radically Changing Patient Demographics and Problems for the "Affirmative" Model

69. Plaintiffs' experts fail to recognize that the demographics of transgender patients have seen a radical transformation in the last several years. Historically, the condition was rare (less than 0.2% of children), had initial presentation in pre-puberty, was almost exclusively boys, and showed a desistance (i.e., abandonment of cross-sex self-identification) rate of over 80% by mid-adolescence, and over 90% when followed into adulthood. See A Follow-Up Study of Boys With Gender Identity Disorder; Devita Singh, Susan J. Bradley, and Kenneth J. Zucker, Front. Psychiatry, 29 March 2021.

70. Currently, the majority of newly diagnosed transgender children are natal females (over 50%), initial presentation is in early adolescence to young adulthood, and some reports have the overall prevalence rate rising to somewhere between 2 and 10% of school age children. See Evidence for a Change in the Sex Ratio of Children Referred for Gender Dysphoria: Data From the Gender Identity Development Service in London (2000-2017) Nastasja M de Graaf , Polly Carmichael , Thomas D Steensma , Kenneth J Zucker, J Sex Med 2018 Oct;15(10):1381-1383 and also Characteristics of Referrals for Gender Dysphoria Over a 13-Year Period Melinda Chen, M.D., John Fuqua, M.D., and Erica A. Eugster, M.D J Adolesc Health. 2016 Mar; 58(3): 369–371. doi: 10.1016/j.jadohealth.2015.11.010). This means that the diagnosis among females has risen by nearly 50-fold in the last five years (See Gender dysphoria in adolescence: current perspectives, Riittakerttu Kaltiala- Heino, Hannah Bergman, Marja Työläjärvi, and Louise Frisén; Adolesc Health Med Ther. 2018; 9: 31–41. Published online 2018 Mar 2. doi: 10.2147/AHMT.S135432).

71. Additionally, there appear to be "outbreaks" of clusters of adolescent females that are connected either by school, or social media that suddenly appear. This was first reported by

Dr. Lisa Littman of Brown University in her 2018 paper which coined the diagnostic term of Rapid Onset Gender Dysphoria. (See Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria, Littman, L. PLOS One, August 16, 2018; https://doi.org/10.1371/journal.pone.0202330). She found evidence suggesting that these subjects developed transgender self-identification through a social contagion process that included highly rehearsed speech to be used when speaking to psychologists, counselors, pediatricians, and surgeons. A moment's reflection on this single fact should be enough to dissuade anyone from the idea that transgender self-identification is a biologically determined condition. Has there been a mass mutation in the human genome that would cause a fifty-fold increase among girls? Is there some substance abroad in the world that has radically and swiftly altered childhood brain development? The numbers of affected children would easily place this in the category of a pandemic, given the geographic range of the condition in the western world.

72. The transgender treatment industry has not shown the slightest interest in examining alternative causes, and it offers precisely the same treatment model to children whether they experience gender dysphoria from their first days of character formation in early childhood or at age 14 when their psychosexual development is under the tremendous pressures of puberty. All patients are given "affirmation care" in spite of the fact that we are dealing with wildly different psychological processes. The only variation in treatment plan, from the youngest patient to the oldest, is where along that single line of care they are brought in: social transition, puberty blockers, cross-sex hormones, then surgery.

73. Psychological evaluation and treatment, even of the known psychological comorbidities such as depression and anxiety, bipolar disorder, etc., is a priori decried by the American Psychological Association and other political allies as "conversion therapy," even if the therapy

is used to reduce depression and anxiety. Therapists are *barred* by "political correctness" from seeking alternative causal explanations and thus less able to avoid confirmation bias. Properly exploring the possibility of alternative diagnoses, such as anxiety disorder, major depression, or autism spectrum, even though part of the standard of care, is labelled as" trans-phobic."

74. Because the alternative causal explanations identify disorders that are far more treatable, cross-sex identification may, for many patients, be treatable using safe, proven methodologies such as Cognitive Behavioral Therapy (CBT). Instead, "affirmation" advocates claim that CBT — the most tested and validated form of psychotherapy for depression and anxiety relief — is nothing more than" conversion therapy", or even "psychological torture." (See APA Resolution on Gender Identity Change Efforts Feb. 2021 https://www.apa.org/about/policy/resolution-gender-identity-change-efforts.pdf). The transgender treatment industry maintains emotional chaos in these vulnerable patients, giving rise to a continuing "need" for irreversible, sterilizing, unproven, controversial "transitioning" treatments.

D. The Existence of the "Watchful Waiting" Model of Care

75. Plaintiffs' expert witnesses failed to acknowledge even the very existence of the "watchful waiting" model of care.

76. Historically, Gender Identity Disorder (now called Gender Dysphoria) was recognized as a sub-category of Obsessive Compulsive Disorder where the child has a persistent, intrusive thought that they are the wrong sex. This makes sense because the content of the thought meets the three criteria of a delusional thought: It is 1) held with absolute certainty, 2) unpersuadable by contrary evidence, and 3) impossible. In the case of the gender discordant child, the content of the delusional thought relates to their sexed self. These children typically presented in pre-puberty, and care were directed at several important issues: Experiences or perceptions that have provoked fear or anxiety (e.g. child abuse including sexual assault) that might be causing

the child to seek safety in the opposite sex presentation; misinterpretation of family dynamics that may have caused a desire to be the other sex; actual abuse events that may have provoked and habituated the obsessive thought.

77. Individual and family counseling directs the child's thoughts and coping processes in the direction of the truth of their nature, which includes their biological sex. Historically, this "watchful waiting" approach resulted in a complete resolution of symptoms in 80% of children by mid-adolescence, and over 90% resolution by early adulthood. (See Psychosexual outcome of gender-dysphoric children. Madeleine S. C. Wallien, P. Cohen-Kettenis 2008 Psychology, Medicine Journal of the American Academy of Child and Adolescent Psychiatry 10.1097/CHI.0b013e31818956b9; and A Follow-up Study of Girls with Gender Identity Disorder, Kelley D Drummond 1, Susan J Bradley 2, Michele Peterson-Badali 1, Kenneth J Zucker; Dev Psychol. 2008 Jan;44(1):34-45. doi: 10.1037/0012-1649.44.1.34).

78. The "watchful waiting" approach is based upon a recognition that at the heart of the transgender process lies a psychological problem, and this perspective finds strong support in both its natural history (80+% resolution without medical or surgical intervention), and the fact that no objective test, having known error rates, has yet been found that can affirm or reject a "transgender" diagnosis.

79. In contrast to the highly successful results of "watchful waiting," we have the presently regnant "affirmation" model. Under the "affirmation" model, the treating physician is essentially forbidden to consider the transgender condition to be a psychological disturbance apart from the unhappiness and associated impaired social functioning caused by the discordance between their objective biological sex and their interior sense of their gender. Treating profes-

sionals, including pediatricians, endocrinologists, psychologists, and surgeons are strongly discouraged from examining alternate theories concerning the diagnosis and causes, such as clinical anxiety apart from gender discordance, major depression, or the social contagion model of causation. The affirmation model proposes that the child's interior sense of their gender is "their true self," and that the problem demands that the appearance of the body must be radically changed so that it "aligns" with the child's subjective sense of being the opposite sex.

80. The startling difference in outcomes between "watchful waiting" and "affirmation" provides a compelling counter argument to the WPATH guidelines. As stated above, "watchful waiting," which includes individual and family counseling, yields successful resolution of gender discordance by natural maturation in over 80% of children by mid adolescence, and over 90% by young adulthood. This is in stark contrast, with "affirmation care" where we find that children who are enrolled in gender clinics are nearly 100% likely to persist in their cross-sex self-identification through childhood into adulthood. Essentially, at least 80% of affected children who would have resolved their problem and gone onto gender congruence, are instead trapped in the transgender treatment enterprise. The proponents of "affirmation care" have no proven test, with known error rates, by which to distinguish the 90% that will resolve their problem from the 10% that will experience persistence of symptoms into adulthood. The probability of misdiagnosis — the error rate for this process — is 90%. This places the transgender treatment enterprise, including endocrinologists and surgeons, in the category of gross malpractice.

81. Plaintiffs' experts claim that in the case of transgender patients, it would be unethical to randomize patients into control groups and treatment groups, given the high rate of self-harm. This is a specious argument for two reasons. First, randomized case/control studies are

not the only alternative to unreliable, retrospective, biased collected case reports with short follow up on which the transgender industry rests. Longitudinal, population based, long term data is available in the world literature that allows us to evaluate the claims made by the gender affirmation treatment model. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 https://doi.org/10.1371/journal.pone.0016885). In fact, that long-term population based data is very the reason why the Tavistock Institute in London and the Karolinska Institute Hospital in Sweden — in a dramatic change — have *restricted* the use of puberty blockers, cross-sex hormones, and transgender surgery in minors. The famed Swedish hospital's new patient protections require the involvment of research monitoring to protect children from "transitioning" experimental procedures. (See detailed citations in the "Notes" section of this report below).

82. Essentially, the "control group" already exists in the world literature, however the transgender treatment industry ignores this control group, and continues to publish low-quality case-collection studies without controls, with short follow up and massive self-selection biases.

83. Secondly, there is a very long history of results from the "watchful waiting" model against which the "affirmation model" can be compared. But Plaintiffs' experts entirely ignore this data which shows that the historically proven "watchful waiting" model has a "cure" rate of approximately 90%. The "affirmation care" model hasn't even proven basic efficacy, much less high rates of efficacy, given the low to very low quality evidence that they continue to rely on. Its proponents publish only subjective results to which they assign numerical values using unproven test instruments that have no known error rates or predictive value. (E.g., as noted

above, the historic Branstrom study and recantation documented no reliable benefits to patients in a 10yr+ follow-up study.) (See detailed citations in the "Notes" section of this report below).

E. Failure to Acknowledge that Relying on "Consensus Statements" is Not Relying on Evidence.

84. As can be seen in the Complaint in this case and the plaintiffs' expert reports, the primary supports for the "affirmative" approach are the repeated references to "consensus statements" from medical and other associations and the WPATH guidelines. It should be noted that the quality of scientific evidence in medicine can be graded based upon the methodology employed. The methodology of professional consensus seeking is in the lowest category. (See The Levels of Evidence and their role in Evidence-Based Medicine Patricia B. Burns, MPH, Rod J. Rohrich, MD, and Kevin C. Chung, MD, MS. Plast Reconstr Surg. 2011 Jul; 128(1): 305–310.)

85. It should further be noted that consensus statements from such organizations as the American Pediatric Association and the Endocrine Society are not obtained by polling the membership of the entire society, but are instead the product of consensus seeking methodology applied to a very small, self-selected sample of members that happen to be on that particular policy committee. Nonetheless, the "consensus statement" is incorrectly presented as though there is majority if not universal agreement by pediatricians and endocrinologists.

86. Furthermore, WPATH intentionally mis-labels its guidelines, calling them "Standards of Care" (See http://www.wpath.org/publications/soc). Guidelines are a suggested course of treatment that may or may not produce the desired results, and are therefore not mandatory. Labeling their document as "Standards of Care" implies that they are proven treatment methods of very high efficacy that must be adhered to in order to achieve a known and positive outcome, and that deviations from the "standards of care" has a high probability of a poor outcome, and possible legal consequences.. Given that the guidelines offer no scientifically verified

evidence that their outcomes are consistently and overwhelmingly positive, this is a clear misrepresentation of their actual value. For this reason, whenever the acronym "WPATH" is used in conjunction with the words "standards of care," the author of such words is intentionally misleading the reader.

87. The WPATH guidelines also seek to define a "professional" in transgender health. In order to be classified as a "professional" you must simply agree with what the WPATH documents state. (See WPATH Standards of Care section VI p.13 – section VII p.33 (defining the "professional" in terms of compliance with WPATH "standards of care")). This is more characteristic of a cult than a scientific body. Science demands unflinching, ongoing, debate and re-evaluation of hypotheses, quality of data, methodologies, and best practices. In contrast, WPATH demands consensus and compliance with a single, unproven model of care, even when the patients have wildly differing presentations (pre-pubertal vs. adult, co-morbid association with other illness such as autism spectrum etc.).

88. As it happens, among the lead authors of the WPATH guidelines, and their board members, are physicians and surgeons whose practices largely depend on the revenue stream found in transgender services. (WPATH Standards of Care. Pp.109-112 (describing the composition of the committee members, and their consensus methodology used in generating the document)). Essentially, they are saying, "mastectomy is justified in transgender teenage natal females because I said so in the WPATH document that I wrote." This is a classic *ipse dixit* opinion.

VI. CONCLUDING OPINIONS

89. There are no currently no competently conducted, long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are helped by such procedures.

90. There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are injured or harmed by such procedures.

91. There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the reliability and validity of assessing gender identity by relying solely upon the expressed desires of a patient.

92. There are no long-term, peer-reviewed published, reliable and valid, research studies documenting any valid and reliable biological, medical, surgical, radiological, psychological, or other objective assessment of gender identity or gender dysphoria.

93. A currently unknown percentage and number of patients reporting gender dysphoria suffer from mental illness(es) that complicate and may distort their judgments and perceptions of gender identity.

94. A currently unknown percentage and number of patients reporting gender dysphoria are suffering social contagion and social pressure processes brought on by a peer group, social media, YouTube role modeling, and/or family dynamics.

95. Patients suffering from gender dysphoria or related issues have a right to be protected from experimental, potentially harmful treatments lacking reliable and valid, peer reviewed, published, long-term scientific evidence of safety and effectiveness.

96. It would be a serious violation of licensing rules, ethical rules, and professional standards of care for a health care professional to provide gender transition or related procedures to any patient without first properly obtaining informed consent including informing the patient and/or guardian(s) of the lack of valid and reliable on the long-term risks and benefits of "affirmative" treatments.

97. A large percentage of children (over 80% in some studies) who questioned their gender identity will, if left alone, develop an acceptance of their natal (biological) sex.

98. Medical treatments may differ significantly by sex according to chromosomal assessment but not gender identity. Misinforming physicians of a patient's biological sex can have deleterious effects on treatment for medical conditions.

99. Affirmation medical treatments — hormones and surgery — for gender dysphoria and "transitioning" have not been accepted by the relevant scientific communities (biology, genetics, neonatolgy, medicine, psychology, etc.).

100. "Gender affirmation" assessments and treatments — hormones and surgery — for gender dysphoria and "transitioning" have no known, peer reviewed and published error rates.

101. Political advocates, activist physicians, and medical organizations that operate by voting methodologies (e.g., WPATH, the American Medical Association, the American Academy of Pediatrics, the American Endocrine Society) are not the relevant scientific community, they are politically active professional organizations. These organizations operate via consensus-seeking methodology (voting) and are easily swayed by political ideologies rather than evidence-based scientific methodologies.

102. Experts in legal cases have an ethical obligation to honestly, fairly, and accurately disclose and discuss the international controversies regarding the safety, effectiveness, reliability, and credibility of the gender transition industry. It is astonishing that in their expert declarations, Plaintiffs' experts failed to disclose and discuss the serious controversies, complex issues, debates, and contrary national science review recommendations in this field. It is difficult to imagine a more inaccurate summary of the state of the embattled, experimental transgender treatment industry. (See detailed citations in Notes section below).

VII. RESEARCH NOTES

To assist in my testimony in this case, I include my notes, references and citations documenting the depth and breadth of the serious controversies in this field. Over the past few years, the glaring defects in the research foundations of the gender transition industry have been exposed for all the world to see.

See, Vrouenraets et al, Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study, Journal of Adolescent Health 57 (2015) 367e373. …"no consensus exists whether to use these early medical interventions." The study shows that there is no agreement concerning the causes of gender dysphoria, which give rise to very different treatment strategies that are at times in diametric opposition. As a result of this confusion of explanations, "consensus" regarding treatment is ipso facto impossible. Results: Seven themes give rise to different, and even opposing, views on treatment: (1) the lack of an explanatory model for GD; (2) the unknown nature of GD (normal variation?, social construct?, or mental illness?); (3) the role of physiological puberty in developing gender identity; (4) the role of comorbidity [with severe mental illnesses] ; (5) unknown possible physical or psychological effects of (refraining from) early medical interventions; (6) child competence and decision making authority [to give truly informed consent to be sterilized for experimental procedures?]; and (7) the role of social context …how GD is perceived. Strikingly, the guidelines are debated both for being too liberal and for being too limiting. Conclusions: As long as debate remains on these seven themes and only limited long-term data are available, there will be no consensus on treatment. Therefore, more systematic interdisciplinary and (worldwide) multi-center research is required. It is striking that plaintiffs' experts somehow both failed to properly report this ongoing international debate within their claimed filed of expertise.

See, Dhejne et al. (2011), Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden, PLOS ONE 6(2) e16885 ("Long Term"); See also, R. K. Simonsen et al. (2016), Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality, Nordic J. of Psychiatry 70(4). Swedish follow-up study of patients who underwent sex-reassignment surgery over a 30-year period found a suicide rate in the post-Sex Reassignment Surgery (SRS) population 19.1 times greater — after affirmation treatment — than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions.

See, Carmichael P, Butler G, Masic U, et al. Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. medRxiv 2020.12.01.20241653. Self-harm did NOT improve and "no changes in psychological function," meaning no improvement. (Also, "YSR [Youth Self Report] data at 36 months (n = 6) were not analyzed." No significant effect on their psychological function, thoughts of self-harm, or body image, a study has found… children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16. The findings, from a study of 44 children treated by the Gender Identity Development Service (GIDS) run by the Tavistock and Portman NHS Foundation Trust in London, have emerged as the trust prepares to appeal against a High Court ruling that led NHS England to pause referrals of under 16s for puberty blockers.

Demographics**:** no biological explanation. The radical change in patient demographics from early onset in boys to teen girls with rapid onset— has been termed late-, adolescent-, or

rapid-onset gender dysphoria — has now been seen in every gender clinic in the western world, and there has been a huge surge in the number of cases. "National College Health Assessment: ACHA-NCHA s://www.acha.org/NCHA/ACHANCHA_Data/Publications_and_Reports/NCHA/Data/Publications_and_Reports.aspx?hkey=d5fb767c-d15d-4efc-8c41-3546d92032c5 See, Kaltiala-Heino, Riittakerttu, Hannah Bergman, Marja Työläjärvi, and Louise Frisen. "Gender Dysphoria in Adolescence: Current Perspectives." Adolescent Health, Medicine and Therapeutics Volume9 (March 2018): 31–41. https://doi.org/10.2147/AHMT.S135432 See, Vries, Annelou L.C. de. "Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents." Pediatrics 146, no. 4 (October 2020): e2020010611. https://doi.org/10.1542/peds.2020-010611. See, Zucker, Kenneth J. "Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues." Archives of Sexual Behavior 48, no. 7 (October 2019): 1983–92. https://doi.org/10.1007/s10508-019-01518-8.

Great Britain (NICE), Deborah Cohen and Hannah Barnes, Evidence for puberty blockers use very low, says NICE at https://www.bbc.com/news/health-56601386 ["The evidence for using puberty blocking drugs to treat young people struggling with their gender identity is "very low", an official review has found. The National Institute of Health and Care Excellence (NICE) said existing studies of the drugs were small and "subject to bias and confounding"

See, Asscheman H, Giltay EJ, Megens JA, et al. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. *Eur J Endocrinol.* 2011;164:635-642. *"There is no evidence that transition reduces suicide when we look past 10 years, and there is some suggestion that* **suicide rates may actually increase** *after the transition*

honeymoon phase is over," says Malone, stressing the importance of providing proper evaluation and appropriate psychological treatment for any suicidal tendencies. (Supports the Branson conclusions after recantation and correction).

Sweden - Review of Gender dysphoria in children and adolescents: an inventory of the literature, SBU Policy Support no 307, 2019 www.sbu.se/en • registrator@sbu.se Contact SBU: Jan Adolfsson, Medical Advisor, Project Manager, jan.adolfsson@sbu.se, English Proofreading: Project group and Jan Adolfsson, SBU [" No relevant randomized controlled (treatment outcome) trials in children and adolescents were found."] ; See, also e.g., FINLAND Issues Strict Guidelines for Treating Gender Dysphoria at https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/. In 2020, Finland reportedly became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that there is a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria…. they also issued the guideline ordering "No surgical interventions are allowed for children under the age of 18".). As the *methodological quality of the studies was already poor* based on the type of study, thus no actual quality assessment or determination of the degree of evidence was performed."] ;

See, Cochrane Review (See, Haupt, C., Henke, M. et. al., Cochrane Database of Systematic Reviews Review - Intervention, Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women, 28 November 2020.)

See, Griffin, L., Clyde, K., Byng, R., Bewley, S., Sex, gender and gender identity: a re-evaluation of the evidence. BJPsych Bulletin (2020) doi:10.1192/bjb.2020.73, Cambridge University Press, 21 July 2020, the authors noted the hazardous error of mandating "affirmation treatments" — thus requiring the negligent practice of Confirmation Bias — rather than properly and carefully exploring alternative hypotheses — the standard, required ethical, medical standard of practice. As Griffin discussed, "Attempts to properly explore, formulate and treat coexisting mental illness in gender dysphoric populations, including that relating to childhood trauma, might be considered tantamount to 'conversion therapy'. Although mental illness is overrepresented in the trans population it is important to note that gender non-conformity itself is not a mental illness or disorder. As there is evidence that many psychiatric disorders persist despite positive affirmation and medical transition, it is puzzling why transition would come to be seen as a key goal rather than other outcomes, such as improved quality of life and reduced morbidity. When the phenomena related to identity disorders and the evidence base are uncertain, it might be wiser for the profession to admit the uncertainties. Taking a supportive, exploratory (psychotherapy) approach with gender-questioning patients should not be considered conversion therapy." In addition, Griffin et al wrote: "Transgender support groups have emphasized the risk of suicide. After controlling for coexisting mental health problems, studies show an increased risk of suicidal behaviour and self-harm in the transgender population, although underlying causality has not been convincingly demonstrated.

See, Dyer, C., Puberty blockers do not alleviate negative thoughts in children with gender dysphoria, finds study BMJ 2021; 372 doi: *https://doi.org/10.1136/bmj.n356* (Published 08 February 2021), BMJ 2021;372:n356 (Puberty blockers used to treat children aged 12 to 15 who

have severe and persistent gender dysphoria had no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found. However, as expected, the children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16)

See, Bränström and Panchankis long term surgical results. NO benefit (data suggests and suggests an increased risk of serious suicide attempts). See, Kalin, N.H., Reassessing Mental Health Treatment Utilization Reduction in Transgender Individuals After Gender-Affirming Surgeries: A Comment by the Editor on the Process by the Editor-in-Chief The American Journal of Psychiatry, Am J Psychiatry 2020; 177:7 64; doi: 10.1176/appi.ajp.2020.20060803; See also, Anckarsäter, H., and Gillberg, C., Methodological Shortcomings Undercut Statement in Support of Gender-Affirming Surgery, Am J Psychiatry 2020; 177:764–765; doi: 10.1176/appi.ajp.2020.19111117.

See, e.g., Wold, A. (M.D., Ph.D.) Gender-Corrective Surgery Promoting Mental Health in Persons With Gender Dysphoria Not Supported by Data Presented in Article, Am J Psychiatry 2020; 177:768; doi: 10.1176/appi.ajp.2020.19111170. [among the individuals examined in the Branstrom study discussed here, the risk of being hospitalized for a suicide attempt was 2.4 times HIGHER if they had undergone gender-corrective surgery than if they had not…. the data presented in the Branstrom article do not support the conclusion that surgery is beneficial to mental health in individuals with gender dysphoria."]

"Therefore, … the data in the article … *OVERTURNS the authors' stated conclusions, suggesting that sex reassignment surgery is in fact associated with INCREASED mental health*

treatment See, Ring, A. (PhD) and Malone, W. , Confounding Effects on Mental Health Observations After Sex Reassignment Surgery, Am J Psychiatry 2020; 177:768–769; doi: 10.1176/appi.ajp.2020.19111169.

See, See, Van Mol, A., Laidlaw, M. K., Grossman, M., McHugh, P., Gender-Affirmation Surgery Conclusion Lacks Evidence, Am J Psychiatry 177:8, August 2020 ajp.psychiatryonline.org 765. "The study confirms the strong association between psychiatric morbidity and the experience of incongruity between gender identity and biological sex. However, the study does NOT demonstrate that either hormonal treatment or surgery has ANY effect on this morbidity. It seems that the main message of this article is that the incidence of mental health problems and suicide attempts is especially HIGH in the year AFTER the completion of gender-affirming surgery [It is telling that the authors somehow ignored this most essential finding] …" See, Curtis, D., Study of Transgender Patients: Conclusions Are Not Supported by Findings, Am J Psychiatry 2020; 177:766; doi: 10.1176/appi.ajp.2020.19111131.

See, Malone, W. and Roman, S., Calling Into Question Whether Gender-Affirming Surgery Relieves Psychological Distress, Am J Psychiatry 2020; 177:766–767; doi: 10.1176/appi.ajp.2020.19111149. "Bränström and Pachankis study on mental health treatment and suicide attempts … is misleading because the study design is flawed." "The authors first found what was already known … the rate of psychiatric morbidity is much higher in persons with gender dysphoria compared with the general population (both before AND after "transitioning"). The authors then explored if the risk for mental health treatment changes as a function of years since starting HORMONAL treatment. They find NO effect (odds ratio = 1.0), but they do find a trend toward INCREASED risk of suicide attempts as a function of years since starting

[gender affirmation] HORMONAL treatment. They somehow failed to publish this essential finding.

See, Landén, M. (M.D., Ph.D.) The Effect of Gender-Affirming Treatment on Psychiatric Morbidity Is Still Undecided, Am J Psychiatry 2020; 177:767–768; doi: 10.1176/appi.ajp.2020.19111165. This conclusion is not supported by the data presented in the article.

See, Bränström, R. and Pachankis, J., Toward Rigorous Methodologies for Strengthening Causal Inference in the Association Between Gender-Affirming Care and Transgender Individuals 'Mental Health: Response to Letters, Am J Psychiatry 2020; 177:769–772; doi: 10.1176/appi.ajp.2020.20050599.

2020 - Sweden, following a national review of transgender science, published a new guideline that is NOT consistent with WPATH protocols nor the opinions of the plaintiffs' experts in this case. https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/ The Swedish National Guidelines appear quite contrary to the opinions of Plaintiffs Experts and WPATH.

2020 - Finland following a review of transgender science, became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that *there is* ***a*** lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria. This new Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery and suggests different care plans for early-onset vs late-onset childhood gender dysphoria. The 2020 Finland guidelines state "Only limited research

has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare."] The Finland National Guidelines appear quite contrary to the opinions of Plaintiffs Experts and WPATH.

See, https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/ Finland Clinical Guidelines and Conclusions Three reports were created by COHERE in Finland. The report "Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendation" clarifies the roles of different healthcare providers in a situation where a minor is uncertain about their gender identity. They also produced general recommendations for the treatment of transgender people, which applies to adults. And interestingly, a third and separate set of recommendations for the treatment of gender dysphoria related to non-binary people and people with gender identities other than opposite-sex gender identities.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 8, 2021.

Patrick W. Lappert, MD

Curriculum Vitae

Patrick W. Lappert, MD
Board Certified in Surgery and Plastic Surgery
Decatur, AL 35603

Education and Training :

— Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. Research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump.

— M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md.

— General Surgery Residency at the Naval Hospital Oakland/ UC Davis East Bay Consortium, 1987-1991

— Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991.

— Plastic Surgery Residency at the University of Tennessee- Memphis, 1992-1994.

Board Certifications in Medicine :

— Board Certified in Surgery — American Board of Surgery, 1992, in

— Board Certified in Plastic Surgery — American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008.

Medical Staff Appointments :

EXHIBIT A

— Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992

— Associate Professor of Surgery, UC Davis-East Bay, 1991-1992.

— Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, VA 1994-2002

— Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, VA 1996-2002.

— Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002

— Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, VA 1996-20002

— Founding Director, Wound Care Center, Naval Hospital Portsmouth, VA 1995-2002.

— Staff Plastic Surgeon in Nebraska, and Alabama.

U.S. Surgeon General Service:

— Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002

Faculty Appointments:

— Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002

Military Service :

— Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978

— Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983 .

— Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985

— Flight Surgeon, Marine Fighter/ Attack Squadron-451

— Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor.

— Deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines.

— Service in the US Navy for 24 years

— Service in the US Marine Corp. for 3 years.

— Retired with the rank of Captain, USN in 2002

Military Awards:

— Navy Commendation Medal - For service with Marine Fighter/Attack Squadron - 451

— Meritorious Unit Citation- 3rd award

— Humanitarian Service Medal - For service in the aftermath of the Loma Prieta earthquake.

Publications - Peer Reviewed Medical Journals :

— Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep;102(3):553-4

— Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. J Plastic and Reconstructive Surgery. 1991; 87: 1048-53

— Lappert P. Patch Esophagoplasty. J Plastic and Reconstructive Surgery. 1993; 91 (5): 967-8

— Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. *J Craniofacial Surg.* 1995;6(4):327–331.

— Lappert PW. Scarless Fetal Skin Repair: “Unborn Patients” and “Fetal Material”. J Plastic and Reconstructive Surgery. 1996 Nov;98(6):1125

— Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. P!astic and Reconstructive Surgery 1998;102(5):1642-5.

Publications - Medical Textbooks:

— Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000

Operations and Clinical Experience - Consultations and Discussions : As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had

occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.